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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,613	03/19/2004	Jang-Young Im	LEPA122603	7871
26389 7590 04/10/2007 CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347			EXAMINER ORTIZ CRIADO, JORGE L	
			ART UNIT	PAPER NUMBER
			2627	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/804,613

Applicant(s)

IM ET AL.

Examiner

Jorge L. Ortiz-Criado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 6-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Species of Figures 6-9, claims 1-5, in the reply filed on 03/08/2007 is acknowledged.

Claims 6-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 03/08/2007.

### ***Claim Objections***

Claims 1 is objected to because the term "PCB" is an acronym, which could mean different things and/or change in meaning overtime, hence it would be desirable to write out the actual words to which the acronym refers. Applicant is reminded that the meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import; and in mechanical cases, it should be identified in the descriptive portion of the specification by reference to the drawing, designating the part or parts therein to which the term applies.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 3 and 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As recited in claims 3 and 5, “the focusing coil pattern is formed in a multiple step”. The examiner cannot ascertain where in the specification support is found as to how the “multiple steps” are performed, or any description of any step being described. Therefore, the specification does not provide such description such as enable one skilled in the art, how to make the claimed invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation “the a wire direction”, it is unclear what the Applicant is trying to encompass with this limitations, making the claim indefinite.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito JP 06-176386 in view of Misono et al. JP 11-306563.

Regarding claim 1, Ito discloses an actuator comprising: a focusing-substrate (10) having a focusing coil pattern (9) for generating focusing driving force, the focusing-substrate being provided with a land part and a hole (as shown in Fig. 1) through which laser beams pass; an object lens (7) for transmitting the laser beams; a blade (8) for holding the object lens, the focusing substrate (10) being fixed on a bottom of the blade; wire attaching parts (15) formed on opposite sides of the blade and connected to the land part; a “PCB” for applying external current to the focusing coil pattern; wires having first end fixed on the wire attaching parts (15) and second ends fixed on the PCB (as explained in [0016] an external current is provided, inherently comprise a “PCB”); tracking coils (12) for generating tracking driving force by receiving current

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from the PCB, the tracking coils being wound at opposite sides of the focusing substrate in parallel with the a wire direction (as shown in Fig. 1); magnets for providing magnetic force to the focusing coil pattern and the tracking coils; and a yoke plate provided with a pair of first yokes for fixing the magnets and a second yoke for fixing the PCB (see [0015]).

Ito does not expressly disclose where the tracking coils being wound around of the focusing substrate.

However, this is a well known standard and well used in the art, as evidenced for example by Misono et al, which discloses this feature where the tracking coils are wound around opposite sides of a focusing substrate (see Fig. 1).

It would have been obvious for an ordinary skill in the art to use the well-known standard technique of performing tracking by having tracking coils wound around opposite sides of a focusing substrate, in order to reduce resonance frequencies as suggested by Misono et al. and further reducing the overall square footage.

Regarding claim 2, Ito discloses wherein the focusing coil pattern is formed of a coil patterned in a spiral shape on the focusing-substrate (See Fig. 1).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito JP 06-176386 in combination with Misono et al. JP 11-306563, and further in view Shizuma JP Publication No. 63-129535 or in the alternative further in view of Kang et al. U.S. 2005/0060732.

Regarding claim 4, Ito in combination with Misono et al, does not expressly shows that wherein the focusing coil pattern is formed of first and second coils that are patterned in a spiral shape on the focusing-substrate at both sides of the hole.

However, this feature is well known in the art and is evidenced by Shizuma which discloses this feature (see Abstract, In regard to Fig. 1, Focusing coil 21).

In the alternative by Kang et al., which also disclose this feature (see Fig. 3, coil 303).

It would have been obvious to one ordinary skill in the art at the time of the invention to pattern the focusing coils with f first and second coils in a spiral shape on the focusing-substrate at both sides of the hole, in order to obtain a more dynamic focusing operation compensating for focus deviation more accurately, since provides better control in more degrees of motion.

Regarding claims 3 and 5, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. No patentable weight has been given to the method of manufacturing limitations (i.e., “wherein the focusing coil pattern is formed in a multiple step”), since “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (571) 272-7624. The examiner can normally be reached on Mon.-Thu.(12:30 pm- 9:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANDREA WELLINGTON  
SUPERVISORY PATENT EXAMINER